

**NR 445 Technical Advisory Group Meeting 12**  
**October 4, 2001 notes**  
**Wisconsin Dept. Natural Resources**  
**101 S. Webster Street, Madison, WI**

**TAG Attendance:** *Jim Beasom, Appleton Papers, Inc.; Jose Bucio, WI AFL-CIO; Hank Handzel, Printing Industries of WI & WI Paper Council; John Hausbeck, Madison Public Health; Howard Hofmeister, Bemis Company; Lynda Knobloch, WI Bureau of Public Health; Brian Mitchell, WI Cast Metals Assoc.; Tom Ravn, Serigraph, Inc.; Annabeth Reitter, Stora Enso; Jeff Schoepke, WMC; Sharon Schwab, League of Women Voters of the Wisconsin Rapids Area; Pat Stevens, WI Transportation Builders Association; Mark Steinberg, SC Johnson; Mark Werner, WI Bureau of Public Health; Ed Wilusz, WI Paper Council; Caroline Garber, WDNR; Patrick Kirsop, WDNR; Jeff Myers, WDNR; Andrew Stewart, WDNR*

**Committee Attendance:** *Renee Bashel, Commerce; Marc Bentley, Bentley Government Affairs; Linda Bochert, Michael, Best & Friedrich; Tom Estock, Quad/Graphics, Inc.; Robert Fassbender, HFO Associates; Luis Fernandez, UW-Madison Safety Dept.; Myron Hafele, Kohler Co. John Heinen, Richland Center Foundry; Stephen Hirshfeld, WisDOT; Dale Hoffmann, Kohler Co.; Susan Lindem, WDNR; Cheryl Moran, Quad/Graphics, Inc.; Jolene Plautz, Kwik Trip; Gerald Reinke, Mathy Construction Co.; Jerry Rodenberg, WDNR; Jason Schwefel, Quad/Graphics, Inc.; Jill Stevens, Alliant Energy; Joan Underwood, Earth Tech; Gerald Waelti, WI Asphalt Pavement Assoc.; Lyman Wible, Kestrel Management; Erin White, USEPA Region 5; Tamera Witer, 3M Company; Xiaochun Zhang, WDNR*

**I. Welcome/Introductions/Review of Meeting Notes/Agenda Review**

- **Welcome** – Caroline Garber welcomed TAG and Toxics Committee members.
- **Review of Meeting Notes** – No changes were made to the June 19<sup>th</sup> TAG minutes
- **Review of Meeting Agenda**  
C. Garber reviewed the agenda and asked for comments. No suggestions for additional items for the agenda were brought forward.

**II. DNR/Foundry Industry Environmental Management System (EMS) Project**

- Patrick Kirsop, DNR Small Business Section Chief and also the Air Management Lead on an EMS Project, discussed how DNR and the foundry industry has established this project and what the goals of the project are (see handout, titled “Wisconsin DNR Environmental Management Systems (EMS) Implementation). The EMS group formed in the project, called the BRAT Company (stands for Benzene Reduction Action Team), will come to the TAG with proposed language for the NR 445 rule revision to allow an EMS compliance approach for benzene reductions by the foundry industry. An EMS is a continual cycle of planning, implementing, reviewing and improving the actions that an organization takes to meet its environmental obligations. This typically also can save companies money as well. One objective of the BRAT Company is to reduce benzene emissions from foundries by 30% from 1999 levels. A DNR-wide goal is to try to expand the use of EMS throughout the agency.
- Brian Mitchell, Executive Director of the Wisconsin Cast Metals Association and an BRAT Company member, discussed some industry perspectives on how the goal of the EMS might also be to better design policies for their industry that do not cause regulatory burdens, while having environmental improvements. In other words, the goal of the project may expand from the single goal of obtaining a 30% reduction in benzene emissions. For example, if foundries agreed to establish an EMS that was agreed to by the company and DNR, perhaps, this agreement could take the place of a permit or somehow be used to show compliance with applicable rules, instead of having to use a more burdensome administrative process or revise permits, etc.

He explained why this approach makes sense to the foundry industry and said that lessons learned from this pilot project can be shared with other foundries in Wisconsin that may not be members of WCMA. Also,

what is learned in the project can be used by the Department to work with other industry groups and trade associations.

- *Question* - P. Stevens asked how could an EMS affect the need to obtain a permit?
- *Response* – P. Kirsop and B. Mitchell responded that at this time, these are just concepts and haven't gone past the point of being "academic exercises" yet. The main consideration for their group is how to support innovative strategies for hazardous chemicals and identify barriers to moving forward. One approach might be to develop an industry specific EMS plan with best management practices for a given pollutant. In that case, one might consider whether a permit is also needed in that case, or if the EMS provides sufficient guarantees that human and environmental health are protected.
- *Question* – B. Fassbender asked about one of the slides - (last slide on p. 6 of handout), for Air/Foundry Objectives for Rulemaking. The slide says "Use EMS elements to evaluate alternative rulemaking processes starting in July 2002". He wanted to know what that statement meant.
- *Answer* – P. Kirsop stated that the Department wanted to look at future regulations and use EMS approaches following the ISO 14001 standard to solve issues in the future.
- *Discussion* - Commenters discussed whether this concept could be applied to other industries and chemicals. Some commenters thought this would require a lot of time and resources on the part of the Department and the Industries. Others thought the idea was intriguing.
- *Question* – E. Wilusz asked whether the use of an EMS (or other aspects of audits, etc. under ISO 14001) as a substitute for a compliance plan might be problematic, particularly from a company perspective. He thought he had heard there was disagreement among the "experts" about the wisdom of using this approach. He wanted to know if anyone else knew about this. He expressed concern with the potential for the EMS to be very prescriptive and how the Department could be telling a company how to run its operations. He related this to the EMS that was prepared by the Wisconsin Paper industry.
- *Discussion* – Several comments were made about possible "pros" and "cons" of using this approach.
- Some of the "pros" were:
  - ▶ Establishing a philosophy of continuous improvement
  - ▶ Having a certified compliance process
  - ▶ An EMS might relieve a source from having to request a LAER variance or submit a compliance plan
- Some of the "cons" were:
  - ▶ having all of the aspects of an EMS in a compliance plan may reduce the flexibility of a company in managing its operations
- *Comment* – P. Stevens said that there may have to be some time allowed for a source to be in compliance with its EMS
- *Question* - How does one apply an EMS to a rulemaking process?
- *Answer* – P. Kirsop stated that you would use EMS elements to guide the process. Starting with analyzing the sources of emissions, you would determine a complete picture of sources and the amount of emissions from each of the sources. The emissions impacts are given a significance criteria and ranked. Depending of the ranking and other criteria, the overall outcome of the process could be a rule, best management practices or other approach for the relevant sources.
- *Question* - Would this approach apply to other media besides air?
- *Answer* – P. Kirsop stated that other DNR programs, such as Hazardous Waste, are working on pilot programs using EMSs. However, while this approach might prove useful in some specific programs, there currently is no broader proposal to use EMSs in all Department rulemaking. This might take a longer period of time and is not now part of the current BRAT project. The current EMS with the foundry industry is a "pilot program" at this time.

### III. Business Impact Analysis

- Caroline Garber, Environmental Studies Section Chief, highlighted the topics to be covered in this part of the meeting (see handout titled, “Progress Report: Business Regulatory Impact Analysis”) and presented an introduction to discussions about a “Map” of how the HAP program operates in the Air Program.
- Andy Stewart, DNR Air Management Engineer. Presented a Map (see large 11X17 size map with 2 additional 8 ½ X 11 sheets of paper) of the air toxics regulatory system, showing activities and decision points in the regulatory process that fall within the source’s area of responsibility, within the department’s area of responsibility, and opportunities for public input into the regulatory process. The map of the proposed rule shows the proposed changes from the existing regulatory system and highlights the streamlining and other proposed enhancements to the process. These improvements are intended to reduce administrative burdens and provide greater flexibility to sources in their decision on what they will do in order to comply with the emission standards.
  - *Comment* - H. Hofmeister suggested that the map would be easier to use if it had a map legend
  - *Discussion* – Many of those present expressed the opinion that it is useful to have this mapping out of how the HAP program is part of permitting and emissions inventory requirements. The map is useful in that it shows how to identify tasks, steps and costs associated with the rule proposals. In addition, the Map is a useful tool for explaining a complex process to the public and others. There was discussion about whether it would be useful or even possible to put this map into the rule – most thought that it does not need to be in the rule.
  - *Comment* – A. Reitter stated that the requirements in NR 405 (Prevention of Significant Deterioration (PSD)) might also be evaluated for inclusion in the Map.
- Jeff Schoepke, WMC, presented information on two workshops that WMC will be organizing to have companies discuss the business impacts of the rule proposals (e.g., to estimate the amount of time and effort needed to evaluate the revised rule and come into compliance with the rule). The goal is to have about 10-20 companies at each workshop that would be between one-half to one day in length. Andy Stewart will present information on how the Map works (showing program integration, etc.) and cover some of the typical evaluation/compliance paths that sources will take. After further briefing in the workshops, participants would evaluate tasks and costs for: a) a base case (the existing rule; b) the proposed revised NR 445 list of chemicals, without any change to the regulatory process and c) the revised rule process as proposed. The information gathered from the workshops would help evaluate the larger costs to industries in the state as a result of the proposed rule. The two workshops are planned for sometime in November (November 1 and another date yet to be determined). The Solid and Hazardous Waste Education Center (SHWEC) at UW-Madison will help with identifying industry sectors that are likely to be impacted by the rule revisions.
- C. Garber, Environmental Studies Section Chief, presented a proposal for an Initial Screening Process (see handout with this title). This concept was presented at the June TAG meeting. The concept is to provide a simple and straightforward process to screen out of the NR 445 regulatory process those sources that would not be expected to emit enough Hap to cause a health concern. One potential screen would be by Standard Industrial Classification Code (SIC), because some businesses like real estate, financial, retail establishments would not normally be expected to emit significant levels of HAPs. A second screen would be by amount of criteria pollutants emitted, Sources emitting less than 1 ton of Volatile Organic Compound (VOC) or 1 ton of Particulate Matter (PM) emissions would be considered as being smaller sources of emissions. The third screen would apply to all sources that had passed through either of the other two screens and identifies factors of concern that a source would have to consider before being “screened out” of the NR 445 process. These factors include: a shorter list of chemicals that are of particular concern; certain types of processes like incineration or chrome plating cases where small emission source are very close to sensitive people and in those cases, those facilities must evaluate their emissions in more detail to ensure health is protected. The assumption for sources that pass through the screens is that they are in compliance with the provisions of NR 445. In cases where a small emission source is later found to be violating the emission standard, the

Department's proposal is to put language in the rule to enable the Department to work with the company to come into compliance.

- *Question* - M. Steinberg asked if the 1 ton of VOC or Particulate Matter was calculated using actual emissions or maximum theoretical emissions.
- *Answer* – C. Garber responded that actual emissions are the intent here.
- *Question* – L. Bochert asked if someone screened out, are they entirely out of the rule, or do other provisions bring them back in.
- *Answer* – C. Garber and A. Stewart responded that sources must also meet the other screening requirements to have this reduced administrative burden for evaluating emissions.
- *Question* – H. Hofmeister asked what happens if a source was eligible to be a smaller emitter and be assumed to be in compliance, but a hospital (or other facility that has a sensitive population) builds across the street. Does one have to re-evaluate the status of the small emission source in this case?
- *Answer* – C. Garber stated that staff would have to consider how best to address this type of issue.
- *Comment* – B. Fassbender commented that generally the concept is OK. However, manufacturing facilities typically will not have this type of option available to them. Manufacturers would also like to have the rule less burdensome too. Because the thresholds are so low and the number of chemicals is so large, having the manufacturing sector “on the hook” for reviewing emissions is not good.
- *Comment* – C. Garber said that staff will work with Rudy Salcedo, John Hausbeck, Mark Werner and other Health Experts to help develop the list of chemicals of concern for this proposal.
- *Comment* – M. Steinberg said it was important to find ways to reduce the regulatory burdens of this rule.

#### **IV. Proposed Certification Process for Initial Compliance Demonstration**

- Andy Stewart, DNR Air Management Engineer, presented a proposal for a self-certification process to demonstrate initial compliance with NR 445 (see handout titled “Compliance Certification”). This process would apply to all sources, except for those with BACT/LAER determinations. Certification would be used to reduce the amount of “up front” permit work required to demonstrate compliance with the rule revisions. Sources would be able to use this certification until such time as their permits (if they have a permit or need a permit) would be reviewed. Sources could always take the option of asking for a permit revision if they desired, but the intent here is not to trigger a permit revision unnecessarily. This approach will save industries and the department time and money. Health and the Environment will be protected because these sources are still required to meet the new standards by the dates to be specified in the rule revisions. The certification process will be designed to be more administratively streamlined than having to re-open permits. Certification would contain a statement that the source is meeting the applicable standards, which chemicals are emitted above threshold values, how the source will comply with the standards, and what records a source will keep to demonstrate that it is in compliance.
- *Question* – What is meant by a new or modified source (in slide 4 of handout)?
- *Answer* - A modified source is defined in NR 400.02(99) and means a source that makes a change that increases the amount of emissions, or results in the emissions of a new hazardous pollutant not previously emitted. Excluded modifications are listed in NR 406.04(4). A new source is defined in NR 400.02(105) and refers to a source that is constructed after the effective date of the rule and subject to the standards in NR 445.
- *Question* – M. Steinberg, responding to the point that the Department would not be able to issue a violation based on a source not following what is said it would do in a compliance certification, asked what is the difference between showing compliance with certification versus showing compliance with a standard.
- *Answer*- A. Stewart responded that someone could not follow what they said they were going to do and there would not be an issue as long as the standards set forth in NR 445 were met. The Department would only be able to take enforcement action if it could be shown that a source violated a standard. For example, in a case where a source said they were only going to use 500 gallons of a coating per year to be below a threshold for a NR 445 non-carcinogen with an ambient air concentration standard, if the source used 600 gallons of coating, modeling at the fence line would have to show that the standard would have been exceeded, in order for there to be a violation of the standard.

- *Question* – Current construction and operation permits already require responsible company officials to certify that they are in compliance with all applicable air regulations. Would this type of signature cover this type of concern?
- *Answer* – Staff will examine this issue and respond to the question in the future.
- *Question* – If you are permitting a source anyway, do you still have to do the certification?
- *Answer* – A source can always opt to put the new conditions into a permit that will demonstrate compliance with the revised rule without also having to certify.

## **V. Proposal to add a 4<sup>th</sup> stack height for threshold levels in NR 445**

- Jeff Myers, DNR Air Management Toxicologist, presented a proposal for including a 4<sup>th</sup> stack height in NR 445 for establishing threshold levels (see handouts titled “4<sup>th</sup> Stack: What and Why”, Threshold Modeling Memo, dated July 25, 2001 from John Roth to Caroline Garber, and “Draft NR 445 Chemical List October 2001” (legal size paper – 14 pages). This would allow source with stacks in the range of 40 to 75 feet a quick screen to allow them to determine compliance with the rule. A list of the chemicals with the applicable thresholds and standards was handed out as well. It was pointed out that there are now four threshold levels for carcinogens that take into account the fact that there is more dispersion from taller stacks. In addition, the thresholds for carcinogens of unknown potency were changed from the proposed 10 pounds for all stack heights, to allow for increased amounts for even taller stacks.
- *Comment* – B. Fassbender noted that in the current rule, threshold values of 25 and 250 pounds per year were used for known and suspected carcinogens that had unknown potencies. The last Department proposal had 10 pounds per year for all stack heights. This current proposal allows only 2.43 pounds per year from a short stack (less than 25 feet), as opposed to the previous version of the proposal, which allowed 10 pounds per year. This new threshold for these short stacks is more than 10 times more stringent than current NR 445 in this regard. In his opinion, one of the major problems with this entire rule proposal is the threshold levels for carcinogens.

## **VI. Proposal regarding asphalt fume**

- Caroline Garber and Andy Stewart, DNR Air Management, presented a proposal for addressing asphalt fume (see handouts titled “Decision Process for NR 445 Listings”, and “Regulating Asphalt Fumes”). C. Garber described how the analysis of options for addressing asphalt fumes fits into the larger picture of the decision process for NR 445 Listings. A. Stewart reviewed the work done to evaluate what is known about asphalt emissions and asphalt fume. A recent USEPA testing report at asphalt plants around the country evaluated emissions of many HAP emissions from asphalt plants, so there is new information available for this source category to estimate emissions of HAPs using emission factors. Many of the HAPs listed in the EPA documents, also contribute to asphalt fumes, which are listed because the ACGIH had recently developed a TLV for them. After evaluating all the available information, the Department determined that regulating asphalt fume, in addition to all of its individual constituents, was unnecessary. The current proposal is that sources emitting fumes of asphalt will use emission factors and other emissions estimation techniques to determine emissions of the 35 specific constituents of asphalt fumes that are in the proposed NR 445 chemical list (for which there are 51 different standards). Sources will not also have to comply with an additional standard for asphalt fumes.
- *Comment* – B. Fassbender commented that there are still opportunities to review other chemicals and source categories where other applicable regulations apply or where it may make sense to re-evaluate the listing of a specific chemical. He said he still has a large number of substances that he still has concerns with. In his opinion, if a chemical does not pose a risk in Wisconsin, then it should not be placed in NR 445. In his view, the Department must determine that there is an existing risk before listing it in NR 445. If a chemical is already regulated via another rule, then it should also not be regulated in NR 445.
- *Comment* – L. Knobeloch said that there is a huge difference between regulating a mixture of chemicals individually versus regulating the effects of the entire mixture, due to synergistic effects,

etc. In the drinking water program, the Department considers these to be additive, in the air program the Department does not.

- *Question* – L. Bochert asked what the Department’s next steps were regarding asphalt
- *Answer* – Asphalt fumes would not be specifically listed in NR 445, but there are individual constituents in asphalt fumes that are in the existing and proposed chemical lists.

#### **VII. Other Business/Wrap Up/ Next meeting**

- C. Garber wrapped up the meeting by saying that an email would be sent to TAG and Toxics Committee members, polling them about a tentative date of Monday December 3<sup>rd</sup> for the next meeting. [Note: this was done and the next meeting date will be Dec. 3<sup>rd</sup>. See below]

#### **VIII. The Next meeting date:**

- ▶ **Monday, December 3, 2001**, from 9:30 am – 3:30 p.m. at the DNR offices in Madison, Room 027 in the GEF 2 Building, 101 S. Webster Street.
- ▶ Additional meetings have been tentatively scheduled for **Monday January 7, 2002** and **Monday, February 4, 2002** at the DNR offices in Madison Room 027 in the GEF 2 Building, 101 S. Webster Street , from 9:30 a.m. – 3:30 p.m.